### U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

Bismuth, Quarterly

#### For information call:

R. D. Brown, Jr. (703) 648-4984

C. F. Crews (Survey Data Information) (703) 648-7949

For MINES-DATA computer bulletin board call:

(703) 648-7799 (2400,N,8,1) for access (703) 648-7943 for technical assistance

For MINES Faxback call: (703) 648-4999

### **BISMUTH IN THE SECOND QUARTER 1996**

Domestic consumption of bismuth in the second quarter of 1996 was 18% lower than in the first quarter, and 19% lower than in the second quarter of 1995. The weakest comparative showing in consumption was in the metallurgical sector.

On April 15, 1996, ASARCO Incorporated announced that it had reached agreement with the City of Omaha, NE, to cease all operations at its Omaha refinery by February 1, 1998, and remediate the property for use as a park. The company stopped lead refining at Omaha on June 1, 1996, but plans to continue processing other materials, including bismuth, at the plant for another year and a half.

No bismuth was sold from the Defense National Stockpile during the second quarter. The Defense Logistics Agency (DLA) announced its intention to change from a sealed bid auction to negotiated sales for the disposition of bismuth contained in the Stockpile.

The average weekly published dealer price for bismuth continued to drop, from \$3.97 per

pound at the beginning of the quarter to \$3.55 per pound at the end. Anticipated supply appears adequate to meet expected demand despite the forthcoming shut down of the only domestic primary source, Asarco's Omaha, NE, plant.

#### **Update:**

The DLA made its first solicitation under the negotiated sales system on August 14, 1996. Bids will be opened on September 4. If none are accepted, the DLA will attempt to negotiate terms of the sale with the companies who offered bids. Any part of the 83,500 kilograms available that is not sold that day will be offered on September 25 and the third Wednesday of each following month until all the material has been sold.

The average weekly dealer published price showed signs of stabilization. It continued its decline to \$3.38 per pound at the end of the first week in August, but rose to \$3.40 by mid-month.

## TABLE 1 SALIENT BISMUTH STATISTICS 1/

#### (Kilograms, bismuth content)

|  |           | 1996          |                |              |  |
|--|-----------|---------------|----------------|--------------|--|
|  | 1995 p/   | First quarter | Second quarter | Year to date |  |
| Consumption by use:                        |           |               |                |              |  |
| Chemicals and other uses 2/                | (3/)      | 255,000       | 218,000        | 473,000      |  |
| Fusible alloys and metallurgical additives | (3/)      | 150,000       | 115,000        | 265,000      |  |
| Imports for consumption 4/                 | 1,450,000 | 441,000       | NA             | NA           |  |
| Exports 4/                                 | 261,000   | 12,100        | NA             | NA           |  |
| Price per pound, dealer, end of period 5/  | \$4.20    | \$3.97        | \$3.55         | XX           |  |
| Stocks, end of period, consumer            | 359,000   | 192,000       | 126,000        | XX           |  |

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

 ${\it TABLE~2}$  U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL, ALLOYS, AND WASTE AND SCRAP, BY COUNTRY 1/

#### (Kilograms, metal content)

|                    | 1995       | 1996    |               |         |         |              |
|--------------------|------------|---------|---------------|---------|---------|--------------|
| Country            | Year total | March   | First quarter | April   | May     | Year to date |
| Belgium            | 636,000    | 60,400  | 171,000       | 54,300  | 74,800  | 300,000      |
| Bolivia            | 28,300     |         |               |         |         |              |
| Canada             | 83,900     | 2,400   | 7,830         | 25,100  | 21,200  | 54,200       |
| China              | 82,600     |         | 69,800        | 18,700  |         | 88,600       |
| Germany            | 1,360      | 147     | 200           |         | 13      | 213          |
| Hong Kong          | 21,500     |         |               |         |         |              |
| Japan              | 1,350      |         |               |         | 600     | 600          |
| Korea, Republic of | 10,000     |         |               |         |         |              |
| Mexico             | 444,000    | 52,400  | 137,000       | 29,000  | 47,600  | 213,000      |
| Peru               | 10,900     |         | 19,500        |         |         | 19,500       |
| Russia             | 15         |         |               |         |         |              |
| Spain              | 250        |         |               |         |         |              |
| United Kingdom     | 131,000    | 10,400  | 35,900        | 8,700   | 27,300  | 71,800       |
| Total              | 1,450,000  | 126,000 | 441,000       | 136,000 | 172,000 | 748,000      |

 $<sup>1/\,\</sup>text{Data}$  are rounded to three significant digits; may not add to totals shown.

<sup>1/</sup> Data are rounded to three significant digits, except prices.

 $<sup>2/\</sup> Includes\ industrial\ and\ laboratory\ chemicals,\ cosmetics,\ pharmaceuticals,\ experimental,\ and\ other\ uses.$ 

<sup>3/</sup> Data not available, currently under review.

<sup>4/</sup> Includes metal, alloys, and waste and scrap.

<sup>5/</sup> Price data from Platt's Metals Week.

 ${\bf TABLE~3}\\ {\bf U.S.~EXPORTS~OF~BISMUTH~METAL,~ALLOYS,~AND~WASTE~AND~SCRAP,~BY~COUNTRY~1/}$ 

#### (Kilograms, metal content)

|                    | 1995       | 1996  |               |        |        |              |
|--------------------|------------|-------|---------------|--------|--------|--------------|
| Country            | Year total | March | First quarter | April  | May    | Year to date |
| Argentina          |            | 45    | 45            | 1      |        | 46           |
| Belgium            | 157,000    |       |               | 18,000 |        | 18,000       |
| Brazil             | 32         |       | 50            |        |        | 50           |
| Canada             | 43,200     | 1,680 | 9,400         | 198    | 19,500 | 29,100       |
| China              | 30,300     |       |               |        |        |              |
| Dominican Republic |            |       | 416           |        |        | 416          |
| France             | 15,500     | 1,550 | 1,900         | 3,480  |        | 5,380        |
| Hong Kong          | 80         |       |               | 14     | 7      | 21           |
| Korea, Republic of |            |       |               |        | 3      | 3            |
| Ireland            | 414        |       |               |        |        |              |
| Mexico             | 363        |       |               |        |        |              |
| Netherlands        | 307        | 209   | 209           |        |        | 209          |
| Saudi Arabia       | 1,480      |       |               |        |        |              |
| Singapore          | 2,320      | 100   | 100           |        |        | 100          |
| Switzerland        |            |       |               |        | 2,220  | 2,220        |
| Taiwan             | 650        |       |               |        |        |              |
| United Kingdom     | 9,680      |       |               |        |        |              |
| Other              | 224        |       |               |        |        |              |
| Total              | 261,000    | 3,590 | 12,100        | 21,700 | 21,700 | 55,600       |

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.